

LECTURES ON ARCHITECTURE AND ANTIQUITIES.*

Conclusion of Lecture II.

OF PERSEPOLIS, the ancient capital of Persia, but few ruins remain to attest its former magnificence. It was set on fire by Alexander the Great in one of his drunken fits, and never recovered its ancient splendour. A magnificent terrace supported an immense number of columns, whence it was called the Palace of Forty Pillars. "On ascending the platform on which the Palace of Forty Pillars once stood," says Sir R. Ker Porter, "nothing can be more striking than the view of its ruins, so vast and magnificent, so fallen, mutilated, and silent,—the court of Cyrus, the pavilion of Alexander's triumph, and the memorial of the wantonness of his power." Again, Sir R. Ker Porter says, "On drawing near the Chehel-Minar, the eye is riveted by the grandeur and beautiful decorations of the flight of steps which lead up to them. This superb approach consists of a double staircase, projecting considerably before the northern face of the terrace, the whole length of which is 212 feet; at each extremity, east and west, rises another range of steps; and again, about the middle, projecting from it 18 feet, appear two smaller flights rising from the same point. Here the extent of the range, including a landing-place of 20 feet, amounts to 86. The ascent, like that of the great entrance from the plain, is extremely gradual; each flight containing only 32 steps (none exceeding 4 inches in height), in breadth 14 inches, and in length 16 feet. The whole front of the advanced range is covered with sculpture. The eye at first roves over it lost and bewildered by the multitude of figures." Among the sculptures, figures of bulls (some of the capitals are formed of bulls kneeling), and of lions, are of frequent occurrence, and the lotus flower is often introduced.

In some magnificent portals or doorways yet standing, the large, overhanging, hollow cornice, is too strikingly like that in Egyptian temples to pass unnoticed; and Mr. Guitt observes that "the similarity between them points to the conjecture that, though neither might have been borrowed from the other, they are not many removes from one common parent." And again: "No person can look at the style of composition and details of Persepolis without a conviction of some intimate connection between the architects of Persia and those of Egypt." (*Encyclopædia of Architecture*.)

ECBATANA was the capital of ancient Media, and was eight leagues in circumference, and surrounded by seven walls in the form of an amphitheatre, the battlements of which were painted in various colours, and covered with silver and gold. It was here that Tobit resided with his family after the death of his parents. (*ch. xiv. v. 12*.) Josephus tells us (*Antiq. b. x. ch. xi. s. 7*) of the prophet Daniel that he "built a tower at Ecbatana in Media; it was a most elegant building, and wonderfully made, and it is still remaining, and preserved to this day; and to such as see it, it appears to have been lately built, and to have been no older than that very day when any one looks upon it, it is so fresh, flourishing, and beautiful." It was at Ecbatana that Hephæstion, the favourite friend of Alexander, died, and it was here that Cyrus was buried:

"The eagle child of victory, the great, the wise, the just,
Assyria's fam'd and conquering sword, and
Media's regal strength."

Some writers, however, place his tomb at Pasargada, where the kings of Persia were always crowned.

SUSA, the capital of the Persian empire, when Persia and Media were united, was 120 furlongs in extent. The treasures of the kings of Persia were kept there, and the royal palace was built with white marble, and its pillars were covered with gold and precious stones. It was usual with the kings of Persia, from the time of Cyrus, to spend the summer at Ecbatana, and the winter at Susa, because the climate was warmer there than at any other royal residence. It derived its name from the quantities of lilies which grew there—*susan* being the Hebrew for *lily*. This city is the

Shushan of the English translation of the Scriptures; it was here that Daniel had his vision of the kingdoms (*ch. viii.*), and we find it frequently alluded to in Nehemiah; but in the Book of Esther we shall find some account of the magnificence of the palace, "where were white, green, and blue hangings, fastened with cords of fine linen and purple to silver rings and pillars of marble; the beds were of gold and silver, upon a pavement of red, and blue, and white, and black marble." (*ch. i. v. 6*.) The King Ahasuerus, mentioned in the Book of Esther, is supposed, by Archbishop Usher, to be Darius Hystaspes, whilst the learned Scaliger thinks that Xerxes was meant; and Josephus states that it was Artaxerxes Longimanus—an opinion followed by Dean Prideaux, Bishop Tomline, and others.

There is much to interest the antiquary in various parts of Asia, as at Petra, the capital of Idumæa, where the sculptured rocks are very remarkable. India demands a lecture for the examination of its truly astonishing works of art—works whose history is lost amid the darkness of superstition. We propose at some future day to devote a little time to the consideration of the excavated temples of India; at present we propose to refresh our sight with the purer treasures of classical architecture, and to bask in the sunny climes of Greece, as a relief from the gloom and darkness of long-forgotten ages. G. R. F.

METROPOLITAN IMPROVEMENTS.†

THAMES EMBANKMENT.

The Plans of Mr. John Martin.

THE plans of Mr. Martin for improving the navigation of the river, and for diverting the sewerage from its shores, have been for many years before the public, and we thought it due to the exertions of that gentleman in aid of an undoubted public good, to comply with a request which he preferred to the commission, through its chairman, to be examined; and we accordingly requested his attendance.

The principal features of Mr. Martin's plan, as applied to the part of the river under consideration by the commission, viz. between Vauxhall and London bridges, are the diversion of the sewerage from the river, and the application of it as a manure; and in connection with this object, an embankment of the river, and upon it a promenade.

The improvement in the sewerage he proposes to effect by uniting the present sewers with main trunks, or intercepting sewers, running parallel with and contiguous to the present bank of the river; and the space between the present wharfs and the embankment he proposes to fill up with solid matter, having large chambers and openings three-quarters of a mile apart, from which chambers the contents of the sewers should be raised by steam-engines, and conveyed in pipes to certain receptacles in the country, and be there distributed in a liquid state for agricultural purposes. The value of this as a manure, the importance of so using it in a commercial point of view, and the injurious effects of its discharge into the river, are fully illustrated in Mr. Martin's description. Should the expense of this disposal of the sewerage operate to the present abandonment of his proposition, he would nevertheless recommend the adoption of the intercepting sewers, with their chambers and

* *שִׁשָּׁן* [Nehemiah, *ch. i. v. 1*; Daniel, *ch. viii. v. 2*.] The city of Shushan, or Susa—*שִׁשָּׁן* [Cantic, *ch. ii. v. 1*.]—Lily.

So little is known of the ancient pronunciation of the Hebrew letters, that modern Jews scattered in various nations, pronounce them very differently; whether the letter *ש* should be denominated *shin* or *sin*, and should have the power of *sh* or *s* simply, is very doubtful. The difference between *ש* and *ס*, supposed to be *sh* and *s*, but confused with each other by different authorities, and by which the Ephraimites were detected (*Judges, ch. xii. v. 6*) when asked to say *שִׁבְלֵת*, but said *סִבְלֵת*, in the English translation of the Scriptures *Shibboleth* and *Sibboleth*; hence in the Vulgate they are translated *Shibboleth* and *Sibboleth*; in Bishop Scio's Spanish translation they are spelled as in the Vulgate, but from the peculiar Spanish sound of *sc*, *Shibboleth* becomes as though written in English *S'hibboleth*; in Diodati's Italian translation they are spelled *Scibbolet* and *Sibbolet*, altering again with the Italian pronunciation.

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openings, which might be allowed to discharge their contents into the river, until his more comprehensive plan could be carried into effect.

In providing for the sewerage and the embankment, Mr. Martin also proposes that a public walk should be obtained along the embankment quay, where there is sufficient width, or where any undue abutment into the river presents an extraordinary obstacle that the walk should pass behind or through it, or through the basement of any building which should form such abutment; and if a carriage-drive is insisted on, that the road should be much wider, and that inclined planes, rising about 1 inch in 30, should be substituted wherever stairs are now proposed.

Mr. Martin recommends the erection of colonnaded wharfs upon the quay, at intervals where the traffic is great, as between Blackfriars and London bridges, to afford additional room for the landing of merchandise; and over this line of colonnaded wharfs, he proposes the public walk to be continued.

"To render the depth of the river at low-water equal, and to preserve the bottom from uneven wear," Mr. Martin recommends the construction of subweirs across the river from shore to shore, by means of piles with beams pinned down upon them—about 100 feet of the middle being lower than the rest of the weir, which should be made to slope to the shore until it meets mean low-water mark. By placing the weirs at distances of a quarter of a mile, the fall would, in Mr. Martin's opinion, "be gradually and regularly distributed from Westminster to London bridge."

Of the plans and drawings laid before us by Mr. Martin, we have selected such as we think essential to a clear understanding of his views, and the statement which he addressed to the commission is printed in our minutes of evidence.

Of Mr. Martin's plan for an embankment with a public terrace, the claims were not considered equal to those of other plans prepared for the same objects and lying at the same time before us; and we felt, therefore, at a very early period of our proceedings, that we should not be justified in making it the subject of further inquiry.

The plans to which our attention has been directed, as appearing to exhibit in their details the best mode of effecting an embankment of the Thames, were three in number, viz.:

A plan prepared by Mr. Walker.

A plan prepared by Mr. Page, the acting engineer of the Thames tunnel; and

A plan founded upon the suggestions of a member of the commission.

These will be occasionally referred to as plans A, B, and C, respectively.

The commission proceeded, in the first place, to examine Mr. Walker and Mr. Page in reference to the objects, advantages, practicability, and expense of their respective plans. The official opinion of Captain Beaufort, and the professional opinions of Mr. Hartley, Mr. Cubitt, Mr. Gordon, Mr. Rendel, Mr. Macneil, Mr. Rennie, and Mr. Giles, were subsequently obtained; first, as to those leading and general points which appeared to apply to all the plans; and, secondly, as to the relative merits of the three.

Of these opinions, a portion, it is to be observed, was collected by the commission in the usual form of oral evidence. It occurred to us, however, subsequently, that all the essential questions in an inquiry of this nature might be more effectively condensed, and circulated in writing (an arrangement which was subsequently found conducive also to the parties consulted), and the remainder, therefore, were collected in that form.

Copies of these questions were also addressed to Sir Isambard Brunel, and Mr. J. K. Brunel, and Mr. Doekin; but considerations of health in the first case, and professional engagements and want of time in the other two, deprived the commission of the assistance of these gentlemen.

In addition to the eminent civil engineers above adverted to, we had occasion to examine, upon separate and distinct portions of the inquiry, Mr. J. W. Higgins, a surveyor extensively employed in London, and ordinarily referred to by the corporation for valuations, in cases of embankment upon the river; Mr. R. L. Jones, the chairman of the London-bridge Improvements Committee, a gentleman

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